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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,543	04/15/2004	Toshiaki Ueda	056208.53982US	6548
23911	7590	06/20/2006	EXAMINER	
CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			COMAS, YAHVEH	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 06/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/824,543

Applicant(s)

UEDA ET AL.

Examiner

Yahveh Comas

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 9-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 9-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/20/05-4/15/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "9" and "19" have both been used to designate conductor (page 10, line 11). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1-3 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Umeda U.S. Patent No 5,998,903 in view of Murakami et al. U.S. Patent No. 2001/0019234 in further view of Mills U.S. Patent No. 2,873,514.

Umeda discloses an alternator a rotor (3) having a plurality of N and S poles alternately arranged in a rotating direction, a stator including a annular stator core (32) surrounding the rotor and provided with a plurality of slots, and a multiphase stator winding embedded in the slots and a frame (43, 44) supporting the rotor and the stator. Umeda disclose the claimed invention except for how the stator winding is formed.

However, Murakami disclose a stator winding formed by winding a plurality continuous wires around a spool (25) such that straight parts of the stator winding pressed flat in a flat shape in order to simultaneously wind a plurality of strip coil member (21), and sets of windings are folded back alternately outside the slots (13) of the stator core (11) and are wound such that the sets of windings are embedded alternately in the direction of the depth of the slots every predetermined number of slots, leading and trailing ends of the plurality of continuous wires are superposed after being wound at least one turn around the circumferentially arranged slots (13) of the stator (11).

However, Mills disclose a stator assembly wherein continuous wires are wound in rings around a cylindrical member (1) provided with grooves (7) the number which is equal to the stator slots (8), the cylindrical member (1) is inserted in a bore defined by the annular stator core (2) so that the grooves (7) of the cylindrical member (1) are arranged opposite to the slots (8) in order to insert the coils into the stator slots.

Therefore it would have been obvious to one having skill in the art at the time the invention was made to modify Umeda's invention and provide a stator assembly by winding a plurality continuous wires around a spool such that straight parts of the stator winding pressed flat in a flat shape, and sets of windings folded back alternately outside the slots of the stator core and wound such that the sets of windings are embedded alternately in the direction of the depth of the slots every predetermined number of slots, leading and trailing ends of the plurality of continuous wires superposed after being wound at least one turn around the circumferentially arranged slots of the stator as disclosed by Murakami and a stator assembly wherein continuous wires are wound in rings around a cylindrical member provided with grooves the number which is equal to the stator slots, the cylindrical member is inserted in a bore defined by the annular stator core so that the grooves of the cylindrical member are arranged opposite to the slots since that would had been desirable in order to simultaneously wind a plurality of strip coil member and to insert the coils into the stator slots.

2. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Umeda U.S. Patent No 5,998,903 in view of Murakami et al. U.S. Patent No.

Art Unit: 2834

2001/0019234 in view of Mills U.S. Patent No. 2,873,514 in further view of

Richter et al. U.S. Patent No. 4,427,910

Umeda in view of Murakami and Mills, disclose the claimed invention except for the stator winding being fixed in place by inserting magnetic wedges in the slots.

However Richter discloses a stator having a magnetic wedge (3) in order to holds the stator windings in the slots formed between the teeth of the stator. Therefore it would have been obvious to one having skill in the art at the time the invention was made to modify Umeda's invention and provide a magnetic wedge in the slots in order to holds the stator windings in the slots formed between the teeth of the stator.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yahveh Comas whose telephone number is (571) 272-2020. The examiner can normally be reached on 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2834

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YC


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